

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS FO. BON1450 Alexandya, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/053,801	01/22/2002	Uma Chandrashekhar	CHANDRASHEKHAR 4733 1-2-1-2-2-		
46363 PATTERSON	46363 7590 04/20/2007 PATTERSON & SHERIDAN, LLP/			EXAMINER	
LUCENT TEC	CHNOLOGIES, INC		DOAN, DUYEN MY		
595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702			ART UNIT	PAPER NUMBER	
	11,110 01,102		2152		
····					
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MC	NTHS	04/20/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/053,801	CHANDRASHEKHAR ET AL.			
		Examiner	Art Unit			
		Duyen M. Doan	2152			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	correspondence address			
A SH WHIC - Exter after - If NO - Failu Any I	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATES as ions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION B6(a). In no event, however, may a reply be tin rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on <u>02 Fe</u>	ebruary 2007.				
2a)⊠	This action is FINAL . 2b) ☐ This action is non-final.					
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1,2 and 4-36 is/are pending in the app 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1,2 and 4-36 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
	The specification is objected to by the Examine	r.	:			
10)⊠	The drawing(s) filed on <u>22 February 2002</u> is/are Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correcti	e: a) accepted or b) objected or b) objected or b) objected drawing(s) be held in abeyance. See on is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
,	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form PTO-152.			
Priority u	ınder 35 U.S.C. § 119					
a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau see the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachmen	t(s) .	•				
1) Notic 2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal P 6) Other:	ate			

DETAILED ACTION

This office action is in response to the submission files on 2/02/2007. Claims 1-2,4-36 are amended for examination. Claim 3 is cancelled.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said EIADs) in the last limitation. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination examiner interpret EIADs as only one EIAD, instead of plurality of EIAD.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2,4-20, 25-30,33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chanda et al (us 2002/0095498) (hereinafter Chanda) in view of Pirot et al (us pat 6,856,676) (hereinafter Pirot) and further in view of Duffield et al (us pat 6,912,232) (hereinafter Duff).

As regarding claim 1, Pancha discloses a plurality of internet protocol (IP) services aggregation switches for communicating between respective access networks and a core network, each of said IP services aggregation switches communicating with at least one respective VPN customer user (see Pancha pg.2-3, par 0025-0026, par 0029-0030; pg.8, par 0073, gateway communicate with client via improved IAD); wherein said IP services aggregation switches communicate with said at least one VPN customer user via at least one enhanced integrated access device (EIAD) (see Pancha pg.2, par 0025-0026; pg.8, par 0073, gateway communicate with client via improved IAD); a dynamic virtual private network (VPN) manager, for providing customer network management and policy server functions (see Pancha pg.2-3, par 0029-0030, service provider provide customer with various services, allowing client to increase to decrease their bandwidth purchase); said dynamic VPN manager adapting at least one of said IP services aggregation switches and at least one of said EIADs to provide a bidirectional QoS for at least one IP flow (see Pancha pg.6, par 0055, both inward and outward direction).

Pancha does not explicitly discloses VPN having at least one of a defined quality of service (QoS) parameter, a defined security parameter and a corresponding billing rate, at least one of said QoS parameter and said security parameter and a user interface enabling remote management of a VPN by a VPN customer user and user commands provided to said dynamic VPN manager by said VPN customer user.

Pirot teaches including a user interface enabling remote management of a VPN by a VPN customer user and user commands provided to said dynamic VPN manager by said VPN customer user (see Pirot col.1, lines 14-39; col.10, lines 14-39; col.11, lines 42-67).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Pirot to the system of Duff to remote manage the VPN by a VPN customer user because it would provide faster transport while minimizing delay, also allowing implement of various QoS levels in an effective and manageable way (see Pirot col.1, lines 36-45).

The combination of Pancha and Pirot does not teach VPN having at least one of a defined quality of service (QoS) parameter, a defined security parameter and a corresponding billing rate, at least one of said QoS parameter and said security parameter.

Duff discloses VPN having at least one of a defined quality of service (QoS) parameter, a defined security parameter and a corresponding billing rate, at least one of said QoS parameter and said security parameter (see Duff col.3,

lines 4-51; col.4, lines 1-34, lines 64-67; col.5, lines 1-14, lines 48-61; col.10, lines 1-55; col.11, lines 22-40).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Duff to the system of Pancha-Pirot to include QoS parameter, a defined security parameter for the purpose of allowing the customer to have guarantee communication performance up to each customer profile and the customer of VPN are relieved of the burden to obtain detailed knowledge of the VPN (see Duff col.1, lines 55-63).

As regarding claim 2, Pancha-Pirot-Duff discloses said dynamic VPN manager adapts at least one of said IP services aggregation switches to provide at least one of a guaranteed QoS parameter and a guaranteed security parameter to said VPN (see Pancha pg.2-3, par 0029-0030; pg.8, par 0073).

As regarding claim 4, Pancha-Pirot-Duff discloses said dynamic VPN manager adapt at least one of said enhanced integrated access device (EIAD) to provide at least one of a guaranteed QoS parameter and a guaranteed security parameter to said VPN (see Pancha pg.2-3, par 0029-0030; pg.8, par 0073).

As regarding claim 5, Pancha-Pirot-Duff discloses wherein said QoS parameter comprises at least one of a bandwidth parameter, a jitter parameter and a delay parameter (see Pancha pg.2-3, par 0029-0030; pg.8, par 0073).

As regarding claim 6, Pancha-Pirot-Duff discloses security parameter comprises at least one of an encryption parameter, an authentication parameter and a filtering parameter (Pancha pg.2-3, par 0029-0030; pg.8, par 0073).

As regarding claim 7, Pancha-Pirot-Duff discloses VPN supports at least one of an interactive gaming application and a conferencing application (see Pirot col.1, lines 49-67; col.2, lines 1-38). The same motivation was utilized in claim 1 applied equally well to claim 7.

As regarding claim 8, Pancha-Pirot-Duff discloses said dynamic VPN manager is responsive to a user command to establish an application profile for a VPN, said application profile defining at least one of a QoS parameter, a security parameter and a corresponding billing rate for said VPN during at least one time period, said dynamic VPN manager adapting said at least one of a QoS parameter and a security parameter of said VPN according to said application profile (see Pirot col.5, lines 41-67; col.6, lines 46-67; col.7, liens 1-14; col.11, lines 42-67; col.14, lines 50-65; col.16, lines 36-48, manager provide interface for the customer to perform network management function such as configuring service parameter, SLA). The same motivation was utilized in claim 1 applied equally well to claim 8.

As regarding claim 9, Pancha-Pirot-Duff discloses wherein a command

received from a the VPN customer user comprises a user selection of one of a plurality of VPNs to join (see Pirot col.5, lines 41-67; col.6, lines 46-67; col.7, liens 1-14; col.11, lines 42-67; col.14, lines 50-65; col.16, lines 36-48, manager provide interface for the customer to perform network management function such as configuring service parameter, SLA). The same motivation was utilized in claim 1 applied equally well to claim 9.

As regarding claim 10, Pancha-Pirot-Duff discloses a command received from a the VPN customer user comprises a user selection of one of a plurality of applications based on VPNs to join (see Pirot col.10, lines 14-39; col.11, lines 42-67; col.14, lines 50-65; col.16, lines 36-48). The same motivation was utilized in claim 1 applied equally well to claim 10.

As regarding claim 11, Pancha-Pirot-Duff discloses plurality of VPNs have at least one of respective QoS requirements and security requirements, said QoS and security requirements having corresponding billing rates (see Duff col.3, lines 4-51; col.4, lines 1-34, lines 64-67; col.5, lines 1-14, lines 48-61; col.10, lines 1-55; col.11, lines 22-40). The same motivation was utilized in claim 1 applied equally well to claim 11.

As regarding claim 12, Pancha-Pirot-Duff discloses said plurality of applications have at least one of respective QoS requirements and security

requirements, said QoS and security requirements having corresponding billing rates (see Pancha pg.2-3, par 0029-0030; pg.8, par 0073).

As regarding claim 13, Pancha-Pirot-Duff discloses an enhanced application portal (EAP), for providing said user interface to said VPN customer user and receiving therefrom VPN administration commands adapted to configure said VPN (see Pirot col.10, lines 14-39; col.11, lines 42-67; col.14, lines 50-65; col.16, lines 36-48, provide an interface for the user to perform network management function such as configuring service parameter); a policy server, for communicating configuration parameters to network elements providing said VPN, said network configuration parameters determined according to VPN administration commands and profiles associated with said VPN administration commands (see Pirot col.6, lines 62-67 to col.7, lines 1-14; col.9, lines 50-67; col.8, lines 3-40; service management subsystem provide quality service policy to user base on SLA); and a directory server, for storing VPN topology and operational parameters and providing said VPN topology and operational parameters to said policy server and said EAP, said VPN topology and operational parameters adapted for being updated by said VPN customer user via said EAP (see Duff col.3, lines 4-51; col.4, lines 1-34, lines 64-67; col.5, lines 1-14, lines 48-61; col.10, lines 1-55; col.11, lines 22-40 storing customer profile specify gos parameter for VPN). The same motivation was utilized in claim 1 applied equally well to claim 13.

As regarding claim 14, Pancha-Pirot-Duff discloses at least one element management system (EMS) for managing a plurality of network elements forming said VPN (using EMS for managing network elements is a well known concept in the networking art).

As regarding claim 15, Pancha-Pirot-Duff discloses wherein said apparatus is included within an internet service provider (ISP) network including said access networks and said core network, said dynamic VPN manager being included within a data center of said ISP (see Pancha pg.2, par 0029-0030, service provider managing qos and sla for customer).

Art Unit: 2152

As regarding claim 16, Pancha-Pirot-Duff discloses VPN has associated with it a respective name said VPN customer user being able to perform at least one of a VPN create, VPN modify, VPN store and VPN delete, command using said VPN name (see Pirot col.10, lines 14-39; col.11, lines 42-67; col.14, lines 50-65; col.16, lines 36-48); said VPN modify command allows said VPN customer user to modify at least one of said VPN's topology, QoS parameter, and security parameter (see Pirot col.5, lines 41-67; col.6, lines 46-67; col.7, lines 1-14; col.11, lines 42-67; col.14, lines 50-65; col.16, lines 36-48). The same motivation was utilized in claim 1 applied equally well to claim 16.

As regarding claim 17, Pancha-Pirot-Duff discloses wherein said VPN is retrieved from storage, activated and deactivated using a corresponding VPN name (see Duff col.3, lines 4-51; col.4, lines 1-34, lines 64-67; col.5, lines 1-14, lines 48-61; col.10, lines 1-55; col.11, lines 22-40). The same motivation was utilized in claim 1 applied equally well to claim 17.

As regarding claims 18-20, the limitations of claims 18-20 are similar to limitations of rejected claims 1-2,4-17 therefore rejected for the same rationales as claims 1-2,4-17.

As regarding claims 25-30,33-34 the limitations of claims25-30,33-34 are similar to limitations of rejected claims 1-2,4-17 therefore rejected for the same rationales as claims 1-2,4-17.

Art Unit: 2152

As regarding claims 35-36, the limitations of claims 35-36 are similar to limitations of rejected claims 1-2,4-17 therefore rejected for the same rationales as claims 1-2,4-17.

Claims 21-24, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pancha, Duff and Pirot as applied to claims 18 and 25 above and further in view of Forslow (us 2002/0069278).

As regarding claims 21, Pancha-Pirot-Duff discloses all limitations of claims 18 above but did not expressly disclose dynamic VPN manager is included within a Universal Mobile Telecommunications Services (UMTS) packet transport network, said access networks comprising Gateway Generalized Packet Radio Service support nodes (GGSNs), said user accessing said UMTS packet transport network said dynamic VPN manager causing communications with said user communication device to be routed through a GGSN geographically proximate said user communications device.

Forslow teaches dynamic VPN manager is included within a Universal Mobile

Telecommunications Services (UMTS) packet transport network, said access networks

comprising Gateway Generalized Packet Radio Service support nodes (GGSNs), said

user accessing said UMTS packet transport network said dynamic VPN manager

Art Unit: 2152

causing communications with said user communication device to be routed through a GGSN geographically proximate said user communications device (pg.1, par 20-24).

It would have obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Forslow to the system of Pancha-Pirot-Duff because having the VPN manager included within UMTS would enable the mobile users to roam between access networks with little or no intervention (see Forlsow pg.2, par 27).

As regarding claim 22, Pancha-Pirot-Duff-Forslow disclosed determination of geographic location is made during an authentication procedure (see Forslow pg.1, par 3-4, pg.2, par 27-30). The same motivation was utilized in claim 21 applied equally well to claim 22.

As regarding claim 23, Pancha-Pirot-Duff-Forslow disclosed apparatus is included within a CDMA-2000 packet transport network, said access networks comprising home agents, said user accessing said CDMA-2000 packet transport network with a communications device nominally assigned to a home agent (see Forslow pg.1 par 5-10, page 2, par 27-30); said dynamic VPN manager causing communications with said user communication device to be routed through a home agent geographically proximate said user communications device (see Forslow pg.1 par

Art Unit: 2152

5-10, page 2, par 27-30). The same motivation was utilized in claim 21 applied equally well to claim 23.

As regarding claim 24, the limitation is similar to claim 22, therefore rejected for the same rationale as claim 22.

As regarding claim 31, Pancha-Pirot-Duff-Forslow disclosed VPN supports at least one application having associated with it at least one of respective QoS requirements and security requirements, said QoS and security requirements having corresponding billing rates (see Duff col.3, lines 4-51; col.4, lines 1-34, lines 64-67; col.5, lines 1-14, lines 48-61; col.10, lines 1-55; col.11, lines 22-40).

As regarding claim 32, Pancha-Pirot-Duff-Forslow disclosed at least one of an interactive gaming application and a conferencing application (see Pirot col.5, lines 41-67; col.6, lines 46-67; col.7, lines 1-14; col.11, lines 42-67; col.14, lines 50-65; col.16, lines 36-48). The same motivation was utilized in claim 18 applied equally well to claim 32.

Art Unit: 2152

Response to Arguments

Applicant's arguments with respect to claims 1-36 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2152

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duyen M. Doan whose telephone number is (571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner Duyen Doan Art unit 2152

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100